

# Oropharyngeal Candidiasis in HIV Infection

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Candidiasis may occur in the oropharynx, esophagus, intestines and vulvovagina in patients with HIV infection. Oropharyngeal candidiasis is the most common abnormality in HIV infection.<sup>1</sup> Generally, oropharyngeal candidiasis is caused by *Candida albicans*. Oropharyngeal candidiasis may complain of difficulty in swallowing food, reduce appetite and reduce tolerance of treatment. Oropharyngeal candida colonization in patients with advanced HIV occurs more frequently when the CD4 count levels lymphocytopenia  $< 50$  cells/ $\mu$ L.<sup>1</sup> Clinical manifestations obtained are burning pain, altered taste sensation, and difficulty swallowing liquids and solids, but many patients are asymptomatic.<sup>1,2</sup>

Most oropharyngeal candidiasis showed pseudo-membranous candidiasis or thrush (white plaques on the buccal mucosa, gums, or tongue) and sometimes with acute atrophic candidiasis (erythematous mucosa) or chronic hyperplastic candidiasis (leukoplakia, distinct from "hairy leukoplakia").<sup>1,2</sup> Treatment of oropharyngeal candidiasis in the form of antifungal polyenes (nystatin and amphotericin B), azoles, including the imidazoles (clotrimazole) and triazoles (ketoconazole, itraconazole, fluconazole, voriconazole, ravuconazole, and posaconazole).<sup>1-5</sup>

Zulkhairi et al on study in Medan found that oral candidiasis is the most common gastrointestinal problems in people with HIV/AIDS (97.1%). Several study demonstrated that more lowered CD4 values associated with the onset of oral candidiasis and other gastrointestinal disorders.<sup>4-7</sup> Unfortunately this study did not examine the existence of candidiasis such as candidiasis esophagus and other organs.

## REFERENCES

1. Fichtenbaum CJ, Aberg JA. Candidiasis and HIV [cited 2013 Nov 5]. Available from: URL: <http://hivinsite.ucsf.edu/InSite?page=kb-05-02-03>.
2. Cichocki M. What is thrush? [cited 2013 Nov 5]. Available from: URL: <http://aids.about.com/cs/conditions/a/thrush.htm>.
3. Vazquez JA. Management of oropharyngeal and esophageal candidiasis in patients with HIV infection. HIV Therapy [cited 2013 Nov 5]; 4(3):325-43. Available from: URL: <http://www.futuremedicine.com/doi/full/10.2217/hiv.10.18>.
4. Greenspan D. Treatment of oropharyngeal candidiasis in HIV-positive patients. J Am Acad Dermatol 1994;31:S51-5.
5. Pankhurst CL. Candidiasis (oropharyngeal). BMJ Clin Evid 2013;1304.
6. Kauffman CA, Marr KA, Mitty J. Treatment of oropharyngeal and esophageal candidiasis [cited 2013 Nov 10]. Available from: URL: <http://www.uptodate.com/contents/treatment-of-oropharyngeal-and-esophageal-candidiasis>.
7. Amita GA, Karen A, Wendel KA. Candidiasis oropharyngeal. John Hopkins HIV guide [cited 2013 Nov 10]. Available from: URL: [http://www.hopkinsguides.com/hopkins/ub/view/Johns\\_Hopkins\\_HIV\\_Guide/545026/all/Candidiasis\\_\\_oropharyngeal](http://www.hopkinsguides.com/hopkins/ub/view/Johns_Hopkins_HIV_Guide/545026/all/Candidiasis__oropharyngeal).